

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,338	11/25/2003	Mik Suekawa	200208871-1	6539
22879	7590 05/02/2005		EXAM	INER
	PACKARD COMPANY	LEVI, DA	LEVI, DAMEON E	
	2400, 3404 E. HARMONY UAL PROPERTY ADMIN	ART UNIT	PAPER NUMBER	
FORT COLL	INS, CO 80527-2400		2841	

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)			
		10/722,338	SUEKAWA ET AL. ( Q'			
		Examiner	Art Unit			
		Dameon E. Levi	2841			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. s period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 25 No.	ovember 2003.				
· —	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)□	,—					
·	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) <u>1-20</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray  Claim(s) is/are allowed.  Claim(s) <u>1-20</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	ion Papers					
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>25 November 2003</u> is/an Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Ex	re: a) $\square$ accepted or b) $\square$ object drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority ι	under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachmen	t(s)					
	e of References Cited (PTO-892)	4) Interview Summary				
3) 🔯 Inforr	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	ate atent Application (PTO-152) ·			

Art Unit: 2841

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Pongracz et al US Patent 6269007.

**Regarding claim** 1, Pongracz et al discloses an assembly comprising:

a pivot point(for example, see element 134, Figs 2-6) for coupling the lock assembly to the housing, and

a lock member(for example, see element 125,126, Figs 2-6) capable of rotating and snapping into a detent in the printed circuit assembly to hold the printed circuit assembly in place.

Moreover, regarding the intended use recitation [...for coupling the lock assembly to the housing], it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus (Pongracz et al) satisfying the claimed structural limitations.

Additionally, it has been held that the recitation that an element is "capable of "
performing a function is not a positive limitation but only requires the ability to so
perform.

Art Unit: 2841

**Regarding claim** 2, Pongracz et al discloses wherein the lock member is constructed from sheet metal(for example, see Figs 2-6).

**Regarding claim** 3, Pongracz et al discloses wherein the lock member couples to the housing only at the pivot point and is flexible so that the lock assembly applies a preload to the printed circuit assembly (for example, see element 134,100, also see elements 112, 116 in cooperation with elements 118, Figs 2-6).

**Regarding claim** 4, Pongracz et al discloses wherein all components of the lock assembly affix to the housing so that no additional parts or hardware are used to secure the printed circuit assembly(for example, see element 100, Figs 2-6).

**Regarding claim** 5, Pongracz et al discloses further comprising a finger access detail (for example, see element 133, Figs 2-6) formed into the lock member.

**Regarding claim** 6, Pongracz et al discloses wherein the housing is a hard disk drive housing', and the printed circuit assembly is a hard disk drive printed circuit assembly(for example, see Figs 2-6, see column 5, lines 55-60).

Regarding claim 7, Pongracz et al discloses an apparatus comprising:

a housing(for example, see element 68, Figs 2-6) and

a lock assembly (for example, see element 100, Figs 2-6) capable of securing a printed circuit assembly to the housing, the lock assembly comprising:

a pivot point(for example, see element 134, Figs 2-6) for coupling the lock assembly to the housing; and

Art Unit: 2841

A lock member (for example, see elements 134, 112, 118 Figs 2-6) capable of rotating and snapping into a detent (element 118) in the printed circuit assembly to hold the printed circuit assembly in place.

Moreover, regarding the intended use recitation [...for coupling the lock assembly to the housing], it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus (Pongracz et al) satisfying the claimed structural limitations.

Additionally, it has been held that the recitation that an element is "capable of "
performing a function is not a positive limitation but only requires the ability to so
perform.

**Regarding claim** 10, Pongracz et al discloses wherein the lock member is constructed from sheet metal (for example, see Figs 2-6).

Regarding claim 11, Pongracz et al discloses wherein the lock member couples to the housing only at the pivot point and is flexible so that the lock assembly applies a preload to the printed circuit assembly(for example, see element 134,100, Figs 2-6).

**Regarding claim** 12, Pongracz et al discloses wherein all components of the lock assembly affix to the housing so that no additional parts or hardware are used to secure the printed circuit assembly(for example, see element 100, Figs 2-6).

**Regarding claim** 13, Pongracz et al discloses further comprising a finger access detail (for example, see element 133, Figs 2-6) formed into the lock member.

**Regarding claim** 14, Pongracz et al discloses wherein the housing is a hard disk drive housing', and the printed circuit assembly is a hard disk drive printed circuit assembly(for example, see Figs 2-6, see column 5, lines 55-60).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 9, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pongracz et al US Patent 6269007 in view of Russell et al US Patent 6574118.

**Regarding claim** 8, Pongracz et al discloses the instant claimed invention except comprising keyways attached to the housing capable of accepting and seating the printed circuit assembly.

Russell et al discloses an assembly comprising keyways (for example, see protrusions around periphery of element 110, wherein indentations around periphery of element 150, correspond with in, Figs 3,4,6C) attached to the housing capable of accepting and seating the printed circuit assembly.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included keyways in the housing as taught by Russell et al in the apparatus as taught by Pongracz et al in order to facilitate correct board mounting orientation. Additionally, it has been held that the recitation that an element is "capable"

Art Unit: 2841

of "performing a function is not a positive limitation but only requires the ability to so perform.

**Regarding claim** 9, Pongracz et al discloses the instant claimed invention except further comprising the printed circuit assembly contoured to fit in the keyways and capable of being secured by the lock assembly.

Russell et al discloses an assembly comprising a printed circuit assembly contoured to fit in the keyways (for example, see protrusions around periphery of element 110, wherein indentations around periphery of circuit board 150, correspond with in, Figs 3,4,6C) attached to the housing capable of accepting and seating the printed circuit assembly.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have contoured a printed circuit board to fit in keyways in the housing as taught by Russell et al in the apparatus as taught by Pongracz et al in order to facilitate correct board mounting orientation. Additionally, it has been held that the recitation that an element is "capable of " performing a function is not a positive limitation but only requires the ability to so perform.

**Regarding claim** 20, Pongracz et al discloses an assembly comprising: means for housing electronic and/or electromechanical components(for example, see element 68, Figs 2-6),

means for securing a printed circuit assembly to the housing means(for example, see element 100, Figs 2-6);

means for pivotally coupling the securing means to the housing means so that the

securing means can be rotated between an extended position and a retracted position(for example, see element 134, Figs 2-6);

Pongracz does not expressly disclose:

means for keying the printed circuit assembly to the housing means.

Russell et al discloses an apparatus comprising means for keying a printed circuit assembly to a housing means (for example, see protrusions around periphery of element 110, wherein indentations around periphery of element 150, correspond with in, Figs 3,4,6C) attached to the housing capable of accepting and seating the printed circuit assembly.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included means for keying a printed circuit assembly to the housing means as taught by Russell et al in the apparatus as taught by Pongracz et al in order to facilitate correct board mounting orientation of the printed circuit board within the housing assembly.

**Regarding claims** 15-19, the methods discloses therein are deemed as being inherent in the assembly and operation of the claimed apparatus since the structural elements of the claimed invention are taught or suggested in the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dameon E. Levi whose telephone number is (571) 272-2105. The examiner can normally be reached on Mon.-Fri. (9:00 - 5:00).

Art Unit: 2841

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dameon E Levi Examiner

Art Unit 2841

**DEL** 

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800